

IN THE CLAIMS:

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Amended) A planet assembly ~~according to Claim 3~~ for an epicyclic drive,
said planet assembly having an axis and comprising:

a pin having first and second tapered inner raceways located around and
presented away from the axis, said first and second raceways tapered radially inward
toward each other;

a planet gear located around said pin and carrying first and second outer
raceways, said first outer raceway being present toward said first inner raceway and
said second outer raceway being presented toward said second inner raceway;

first tapered rolling elements organized in a row between said first raceways;

second tapered rolling elements organized in a row between said second
raceways;

wherein said first raceways are oblique to the axis and are inclined in a first
common direction with respect to axis, said second raceways are oblique to the axis
and inclined in a second common direction with respect to the axis, said second
common direction having an opposite inclination to said first common direction, and
whereby said first tapered rolling elements are configured to transmit axial loads in one
direction and said second tapered rolling elements are configured to transmit axial
loads in an opposite direction;

wherein said pin and said planet gear are further configured to define a pair of lubricating gaps circumferentially disposed around opposite ends of said pin, each of said defined lubricating gaps exposing at least a portion of said first and second rolling elements to a lubricating fluid flow;

wherein said pin further has a thrust rib at a large end of said first inner raceway to prevent said first tapered rollers from moving up said first raceways and a seat extended beyond said large end of the second inner raceway; and

a rib ring fitted over said seat to prevent said second tapered rollers from moving up said second raceways, whereby the axial position of said rib ring on said seat is configured to control clearances or an absence of clearances between said tapered rollers and said raceways.

5. **(Amended)** A planet assembly according to claim ~~[[1]]~~ 4 wherein said pin is a unitary structure.

6. **(Amended)** A planetary assembly ~~according to claim 1~~ for an epicyclic drive, said planet assembly having an axis and comprising:

~~a wherein said pin includes~~ including a core, ~~and a sleeve which is located~~ disposed around said ~~core; core,~~ and ~~wherein said~~ first and second inner raceways are disposed on said sleeve around and away from the axis;

a planet gear located around said pin and carrying first and second outer raceways, said first outer raceway being present toward said first inner raceway and said second outer raceway being presented toward said second inner raceway;

first rolling elements organized in a row between said first raceways;

second rolling elements organized in a row between said second raceways; and

wherein said pin and said planet gear are further configured to define a pair of lubricating gaps circumferentially disposed around opposite ends of said pin, each of said defined lubricating gaps exposing at least a portion of said first and second rolling elements to a lubricating fluid flow.

7. (Original) A method of assembling the planetary assembly of claim 4, said method comprising:

placing said first tapered rollers along one of said first raceways;

fitting said pin and gear together such that said first rollers are between said first inner and outer raceways and along said thrust rib;

placing said second tapered rollers between said second raceways; and

advancing said rib ring over said seat until said bearing has a desired setting; and securing said rib ring to said pin.

8. (Original) The method according to claim 7 wherein the step of securing said rib ring includes welding said rib ring to said pin.

9. (Original) The method according to claim 7 wherein said step of placing said first tapered rollers along one of said first raceways includes placing said rollers along said first inner raceway.

10. (Cancelled)

11. (Amended) The combination according to claim ~~[[10]]~~ 14 wherein the carrier further comprises separators extending between the end members to form at least one pocket in which the planet gear rotates.

12. (Cancelled)

13. (Cancelled)

14. (Amended) ~~The combination according to claim 13~~ An improved epicyclic drive including a sun gear, a ring gear, and a carrier having a pair of end members, the improvement comprising:

at least one pin having first and second ends anchored in the end members of the carrier;

a planet gear located around said pin and being engaged with the sun and ring gears;

an antifriction bearing located between said pin and planet gear, said antifriction bearing including

- first and second inner raceways carried by the pin,
- first and second outer raceways carried by the planet gear, said first and second outer raceways presented toward, and located opposite, said first and second inner raceways, said first raceways oblique to the axis and tapered inward relative to a first common direction with respect to the axis, said second raceways oblique to the axis and tapered inward relative to a second common direction with respect to the axis, said second common direction having an opposite inclination from said first common direction such that said first and second raceways taper towards each other;
- first tapered rolling elements arranged in a row between said first raceways, and
- second tapered rolling elements arranged in a row between the second raceways; whereby said first rolling elements are configured to transmit axial loads in one direction and said second rolling elements are configured to transmit axial loads in the opposite direction;

wherein the planet gear and said pin define a lubrication gap adjacent each of said first raceways and said second raceways, said lubrication gaps configured to permit a flow of lubricating fluid to said first and second rolling elements;

wherein said pin further includes a thrust rib at a large end of the first inner raceway to prevent said first rollers from moving up the first raceways and a seat extended beyond the large end of the second raceway; and

wherein said bearing further comprises a rib ring fitted over said seat to prevent said second rollers from moving up said second raceways, whereby the axial position of the rib ring on the seat controls the setting of the bearing.

15. (Original) A planet assembly for an epicyclic drive, said planet assembly comprising:

a pin provided with mounting ends and first and second tapered inner raceways located between said mounting ends, each of said raceways tapering in opposite directions downwardly toward each other, said pin further having a thrust rib projecting beyond a large end of said first inner raceway and a seat extending axially beyond said large end of said second inner raceway;

a planet gear located around said pin and having first and second tapered outer raceways presented toward and located opposite said first and second inner raceways, respectively, said gear being narrower than said pin is long, such that said mounting ends of said pin are located beyond the ends of the gear;

first tapered rollers located between said first inner and outer raceways and against said thrust rib, whereby said thrust rib prevents said first rollers from moving up said first raceways;